

SURGEX®

THE WORLD LEADER IN POWER CONDITIONING TECHNOLOGIES



SX1120RT

SURGE ELIMINATOR & POWER CONDITIONER

- Advanced *Series Mode*® Surge Protection
- *SurgeX ICE*® Inrush Current Elimination
- *Impedance Tolerant*® EMI/RFI Filtering
- *COUVS*® Catastrophic Over/Under-Voltage Shutdown

The SX1120RT has remote control capability for use in AC power distribution systems and can be interfaced with a sequential controller such as the SurgeX SEQ. Switched receptacles can be controlled with an Switched receptacles can be controlled with an applied voltage (5-30 vdc) or contact closure switch connected to the Phoenix connector on the back panel. The connector can also be used to cascade multiple units or provide status to a central controller.

The SX1120RT provides guaranteed surge protection and power conditioning for audio, video, broadcast and computer equipment. The units are 20-amp load-capable and have 8 industrial grade grounded AC receptacles (6 switched, 2 always on) plus a front-panel courtesy receptacle.

The unit features both common mode and normal mode *Impedance Tolerant* EMI/RFI filtering,

SurgeX ICE -Inrush Current Elimination and *COUVS* -Catastrophic Over/Under Voltage Shutdown for a complete power conditioning solution.

SurgeX Advanced Series Mode technology is superior to conventional MOV circuitry or MOV-Hybrid designs and is completely non-sacrificial. Our zero let-through technology provides the most reliable protection available. It stops all surges up to 6,000 volts (unlimited surge current) without producing harmful side effects such as ground contamination or common-mode disturbances.



COUVS®
SURGEX ICE®
Inrush Current Elimination

SURGEX®

Professional AC Power Products
www.surgex.com

10-YEAR WARRANTY

SX1120RT

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SPECIFICATIONS

Load Rating: 20 amps @ 120 volts.

Power Requirement (no load): 15 watts.

Surge Let-Through Voltage (6000-volt surge):
0 volts.

UL 1449 Adjunct Classification Test Results: 1000 surges, 6000 volts, 3000 amps, B3 pulse; Measured suppressed voltage: 170 volts; no failures.

Federal Guidelines: Grade A, Class 1, Mode 1 (CID A-A-55818).

EMI/RFI Filter, Normal Mode (50-ohm load): 40 dB @ 100 kHz; 50 dB @ 300 kHz; 50 dB @ 3 MHz; 50 dB @ 30 MHz

EMI/RFI Filter, Common Mode (50-ohm load):
18 dB @ 300 kHz; 30 dB @ 1 MHz; 50 dB @ 5 MHz;
50 dB @ 20 MHz

Maximum Applied Surge Voltage: 6000 volts.*

Maximum Applied Surge Current: Unlimited, due to current limiting.*

Maximum Applied Surge Energy: Unlimited, due to current limiting.*

Endurance (C62.41-1991 Category B3 pulses):
1 kV>500,000; 3 kV>10,000; 6 kV>1000.

Undervoltage Shutdown: 90 volts (resume at 100 v)

Overvoltage Shutdown: 145 volts (resume at 135 v)

Maximum Load Inrush Current During Power-up:
1000 Joules

Remote Turn-on Applied Voltage Range: 5 to 30 volts DC

Remote Turn-on Current Draw:

Contact Closure: 1.5 mA

5 V DC Applied Voltage: 0.1 mA

12 V DC Applied Voltage: 1.5 mA

24 V DC Applied Voltage: 5.0 mA

Auxiliary Relay Contact Rating: 30 Volts at 1 Amp

LED Output: 12 volts DC, maximum 20 mA (resistor required)

Dimensions: 1.75" H x 19" W x 10.5" D
(4.5 x 48.3 x 26.7 cm)

Weight: 11 lbs (5.0 kg)

Temperature Range: 5° to 35° C

Humidity Range: 5% to 95% R.H., non-condensing.

Agency Listings: ETL and cETL (UL 1449, 2nd edition;
CSA C22.2 No.8-M1986, R2000)

*1.2 x 50 μ s pulse, industry standard combination wave surge, as per IEEE C62.41.

**NO
MOVs**



TECHNICAL DESCRIPTION

The SX1120RT shall be a one-rack-space unit in a magnetic shielding steel enclosure. It shall operate from 120 volts AC and have a 9-foot, grounded, 3-wire #12 line cord. There shall be 8 grounded AC receptacles on the back panel, with 6 switched and 2 always on. The unit shall have a front-panel courtesy receptacle and remote-control capability with a visual indicator. Overall dimensions shall be 1.75" H x 19" W x 10.5" D. Weight shall be 11 pounds.

The SX1120RT shall have a load rating of 20 amps at 120 volts, a self-test circuit with visual indicator, and provide EMI/RFI filtering, inrush current elimination and catastrophic over/under-voltage shutdown. It shall meet Federal Grade A, Class 1, Mode 1 guidelines for powerline surge suppressors and withstand at least 1000 occurrences of surge pulse voltages up to 6000 volts.

FEATURES

- Magnetic shielding steel enclosure
- 9' grounded 3-wire #12 line cord
- 8 grounded AC receptacles on rear panel (6 switched, 2 always on)
- Front panel courtesy receptacle
- Advanced *Series Mode* surge protection
- Advanced *Impedance Tolerant* EMI/RFI filtering
- *SurgeX ICE* inrush current elimination technology
- *COUVS* catastrophic over/under-voltage shutdown
- Remote turn-on
- Thermal circuit breaker overload protection
- Self-test circuit with visual indicator
- 10-year warranty
- **Made in U.S.A.**

SURGEX®

Professional AC Power Products

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www.surgex.com

Specifications subject to change without notice. *SurgeX* is a division of New Frontier Electronics Inc.

This product, including its components and/or processes carried out thereby, are covered by one or more of the following:
U.S. Pat. No. 4,870,534; 4,870,528; 6,728,089; 6,744,613; 7,068,487. Can. Pat. No. 1,333,191; 1,332,439. Other Patents Pending.